

APPENDIX A

MATRIX FOR IMPLEMENTING COMPLIANCE WITH OPERATIONS AND MAINTENANCE PLAN (O&M PLAN), CONTINGENCY ACTION PLAN (CAP) AND COVENANT TO RESTRICT USE OF PROPERTY (COVENANT)

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Land Survey Task 1 Conduct land survey to document GPS coordinates for (1) the area at western end of South Valley that does not require special OE safety precautions, (2) City owned open space at northern boundary of Project Site where TNT strips were located and (3) Wetlands Risk Reduction Area (as defined in Section 2.8.2 of O&M Plan).	§§ 2.8.1 and 2.8.2(a) of O&M Plan and § 1.1 of Covenant	PBH	Complete survey no later than July 15, 2004.	Provide copy of survey report with GPS Coordinates for subject areas to DTSC and City of Benicia within fifteen (15) days following survey completion. As required by § 1.1 of Covenant, no later than July 15, 2004, record document with Solano County Recorder's office providing GPS coordinates for City Owned Open Space where TNT strips were located.
Land Survey Task 2 After US Alert confirms ability to participate in contemplated arrangements with City (as discussed in § 4.2 of CAP), provide GPS coordinates or other survey information for Restricted Areas in format compatible with US Alert's system (US Alert Deliverables)	§3.6 of O&M Plan and § 4.2 of CAP	PBH to support City by providing GPS or other survey information needed by US Alert	As soon as reasonably practicable following confirmation of US Alert arrangements with City and identification of US Alert Deliverables.	Provide report to DTSC and the City on delivery of US Alert Deliverables, within fifteen business days after delivery to US Alert.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Wetlands Monitoring Task 1 Construct mitigation wetlands in accordance with requirements in Wetlands Mitigation Plan, Tourtelot Cleanup Project, Benicia, California, approved May 2001 by Regulatory Branch, San Francisco District, U.S. Army Corps of Engineers (USACE Regulatory), as amended.	§ 3.1.1 and Appendix B of O&M Plan	PBH, using Wetlands Research Associates, Inc. and/or other appropriate contractor	Construction activities have commenced and are to be completed no later than June 30, 2004. Installation of wetland plants in newly constructed area to occur in winter of 2004 after sustained rainy seasons has begun.	Provide to DTSC a copy of Report documenting wetlands development that is required by Section 6.3 of the Wetlands Mitigation Plan. Report to be provided to DTSC concurrently with submittal to USACE Regulatory, the California Department of Fish and Game (CDFG) and Regional Water Quality Control Board (RWQCB).
Wetlands Monitoring Task 2 Perform annual wetlands monitoring, as required under Section 6.0 of the Wetlands Mitigation Plan	Appendix B of O&M Plan	PBH, using Wetlands Research Associates, Inc. and/or other appropriate contractor	Annually for five years following development of mitigation wetlands. First field monitoring event will occur in Spring of 2005, after rainy season, with first report filed by late summer or early fall of 2005.	Provide to DTSC a copy of each annual report that is required by Section 6.3 of the Wetlands Mitigation Plan. Report to be provided to DTSC concurrently with submittal to USACE Regulatory, CDFG and RWQCB.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Wetlands Monitoring Task 3 At end of five year monitoring period, prepare final evaluation report describing success of mitigation in meeting performance criteria and of any necessary corrective measures undertaken.	Appendix B of O&M Plan	PBH, using Wetlands Research Associates, Inc. and/or other appropriate contractor	Five years after completion of development of mitigation wetlands.	Provide to DTSC a copy of the final evaluation report. Report to be provided to DTSC concurrently with submittal to USACE Regulatory, CDFG and RWQCB.
Wetlands Monitoring Task 4 If USACE Regulatory determines that additional efforts are required following submittal of the final evaluation report, implement the required efforts. Otherwise, wetlands monitoring will terminate following submittal of the final evaluation report.	Appendix B of O&M Plan	PBH, using Wetlands Research Associates, Inc. and/or other appropriate contractor	As determined by USACE Regulatory.	Provide to DTSC copies of all reports submitted to USACE Regulatory to report compliance with additional requirements.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Wetlands Risk Reduction Areas Task 1 Perform annual monitoring of thorny plants installed as discussed in Section 2.8.2(a) of O&M Plan to confirm that the plants are viable and become well established and self sustaining	§§ 2.8.2(a) and 3.1.2 of O&M Plan	For first five years, PBH, using Wetlands Research Associates, Inc. and/or other appropriate contractor. See Task 4 below for monitoring thereafter by City.	Need for any replanting will be evaluated in winter, 2004, after sustained rains have begun. First annual monitoring will occur in Spring of 2005, after rainy season, with first report filed by late summer or early fall of 2005.	Provide annual report to DTSC.
Wetlands Risk Reduction Areas Task 2 If inspections under Task 1 reveal that the plants are not becoming established and self sustaining, implement measures to improve their viability or to replace them with other suitable varieties of plants that can adapt better to the conditions while still maintaining a suitable deterrent to public access to the wetlands.	§§ 2.8.2(a) and 3.1.2 of O&M Plan	PBH, using Wetlands Research Associates, Inc. and/or other appropriate contractor	For first five years, monitoring and remedial steps will be PBH's responsibility. Thereafter, the responsibility will shift to City (see Task 4 below) and will continue as needed as long as the wastes remain in place in the Wetlands Risk Reduction Area	Report to DTSC on any action required under Task 2.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Wetlands Risk Reduction Areas Task 3 Conduct annual inspections of signs erected along wetlands, as described in Section 2.8.2(a) of O&M Plan and repair signs, if required, to keep them in good condition.	§§ 2.8.2(a) and 3.1.2 of O&M Plan and Appendix D of O&M Plan	City of Benicia	Annually. First annual report due May 15, 2005.	Provide annual report to DTSC on sign inspection, using Annual Inspection and Report Form (Appendix D to O&M Plan).
Wetlands Risk Reduction Areas Task 4 Beginning in Spring of 2010 the City is to take over responsibility for annual monitoring of thorny plants installed as referenced in Wetlands Risk Reduction Areas Task 1. Monitoring is to confirm that plants are remaining viable and self sustaining. If plants are not remaining viable, City is to implement measure to improve their viability.	Section 3.1.2 of O&M Plan.	City	Monitoring to occur annually, commencing in Spring of 2010.	City's first annual report on monitoring of plants will be due by May 15, 2010. City's five year reports starting May 30, 2014 and every five years thereafter will also cover plant monitoring.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
<p>Slope Stability/Erosion Monitoring Task 1</p> <p>Conduct annual erosion and slope stability monitoring of monitoring areas identified in Appendix C of O&M Plan (Slope Stability and Erosion Monitoring Plan) and compare to the baseline condition described in such Plan.</p>	§ 3.2 and Appendix C of O&M Plan	City of Benicia (Public Works Department or outside City consultant)	Annually following end of rainy season. First annual report due May 15, 2005.	Provide Report on periodic monitoring of erosion and slope stability to DTSC and other parties to O&M using Annual Inspection and Report Form (Appendix D to O&M Plan).
<p>Slope Stability/Erosion Monitoring Task 2</p> <p>If slope instability or erosion is observed in the Historical Landslide Areas that could potentially expose OE, comply with site stabilization and notification requirements in Appendix C to the O&M Plan. If repairs involve Excavation Activities in Restricted Areas, comply with the provisions of Section 5.0 of CAP in conducting the Excavation Activities.</p>	§ 3.2 and Appendix C of O&M Plan; if applicable, § 5.0 of CAP	Any party to O&M Agreement who becomes aware of such slope instability or erosion problems to report same to DTSC and City for appropriate remedial action to be conducted by City.	Any time condition is observed after on-site remedial activities are completed.	If Excavation Activities are required in Restricted Areas to repair erosion features or slope instability, report on Excavation Activities as required by Section 5.0 of the CAP.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Slope Stability/Erosion Monitoring Task 3 If an earthquake of magnitude 5.5 or greater occurs in San Francisco Bay Area, monitor Historic Landslide Areas in accordance with Section 4.5 of Appendix C to O&M Plan	Appendix C to O&M Plan (Slope Stability and Erosion Monitoring Plan)	City of Benicia (Public Works Department or outside City consultant)	As required	If slumping or slope failure is noted, take appropriate steps to stabilize area in accordance with Appendix C and follow applicable procedures for notifying DTSC, as set forth in Section 5 of the CAP.
Slope Stability/Erosion Monitoring Task 4 For Five Year Review, submit report to DTSC evaluating the findings during the five year erosion/slope stability monitoring period and make recommendations to the DTSC for any proposed modification and/or termination of the monitoring requirements.	§ 5.0 and Appendix E to O&M Plan	City of Benicia (Public Works Department or outside City consultant)	First five year report is due by May 30, 2009 and every five years thereafter.	Submit report to DTSC, using Five Year Inspection and Report Form (Appendix E to O&M Plan).

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Land Bridge Mesh Barrier Inspection Task 1 Inspect physical integrity of Land Bridge Mesh Barrier, looking for signs of rust or corrosion and to confirm barrier remains securely staked to Land Bridge slopes. The report should indicate if the Mesh Barrier requires replacement.	§ 3.3 of O&M Plan	City of Benicia (Public Works Department or outside City consultant)	Annually [for 30 years]. First annual report due May 15, 2005.	Provide Report on inspection to DTSC and other parties to O&M using Annual Inspection and Report Form (Appendix D to O&M Plan).
Land Bridge Mesh Barrier Inspection Task 2 For Five Year Review, submit report to DTSC evaluating the findings during the five year inspection period and make recommendations to the DTSC for any proposed modification and/or termination of the inspection requirements.	§ 5.0 and Appendix E of O&M Plan	City of Benicia (Public Works Department or outside City Consultant)	First Five Year Report is due by May 30, 2009. Every five years thereafter	Submit report to DTSC, using Five Year Inspection and Report Form (Appendix E to O&M Plan).
Water Monitoring Task 1 Conduct surface water monitoring.	§ 3.4.1 of O&M Plan	PBH, using appropriate contractor	Semi-annually for two years. Next monitoring event will occur in fall of 2004.	Submit Report to DTSC within 60 days after the monitoring occurs.

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Water Monitoring Task 2 Conduct subdrain monitoring.	§ 3.4.2 of O&M Plan	PBH, using appropriate contractor	Semi-annually for two years. Next monitoring event will occur in fall of 2004.	Submit Report to DTSC within 60 days after the monitoring occurs.
Water Monitoring Task 3 Conduct seep monitoring.	§ 3.4.3 of O&M Plan	PBH, using appropriate contractor	Semi-annually for two years. Next monitoring event will occur in fall of 2004.	Submit Report to DTSC within 60 days after the monitoring occurs.
Water Monitoring Task 4 If water sampling wells are damaged, notify DTSC and make necessary repairs.	§ 4.11 of Covenant	Any party to O&M Agreement who becomes aware of damage shall notify PBH who shall make necessary repairs.	Whenever damage to water sampling wells is discovered.	Provide written notice to DTSC within 10 days of discovery and complete necessary repairs within thirty days of discovery (unless a longer time is authorized by DTSC).
Water Monitoring Task 5 Submit report to DTSC evaluating the findings during the two year water monitoring period and make recommendations to the DTSC for any proposed modification and/or termination of the monitoring requirements and removal of the groundwater monitoring wells	§§ 3.4.1, 3.4.2 and 3.4.3 of O&M Plan	PBH, using appropriate contractor	After two years of water monitoring.	Submit report to DTSC.

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Water Monitoring Task 6 After DTSC approves termination of water monitoring, PBH to remove groundwater monitoring wells	§ 3.4.5 of O&M Plan	PBH, using appropriate contractor and using OE Construction Support to remove monitoring well on slope of Land Bridge	After DTSC approves termination of water monitoring.	Removal of monitoring well in OE Construction Support Areas (slope of McAllister Land Bridge) requires submittal of work plan for DTSC approval. Report on removal of monitoring wells within 45 days of completion. Also provide any other reports required as a result of work in OE Construction Support Area and OE Notice Areas (e.g. reports on any OE items encountered) in accordance with requirements of CAP Section.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Institutional Controls Compliance Monitoring Task 1 Report annually to DTSC on compliance with Covenant. Describe any zoning changes and special use permits for Restricted Areas made with DTSC approval; notify DTSC of any such zoning changes or special use permits legally required without an opportunity to obtain DTSC's prior approval. Confirm that except for such items, no zoning changes or special use permits affecting the Restricted Use Areas have occurred.	§ 3.5 and Appendix D of O&M Plan	City of Benicia (Community Development Department)	Annually (for 30 years). First annual report due May 15, 2005.	Provide Report to DTSC and other parties to O&M using Annual Inspection and Report Form (Appendix D to O&M Plan).
Institutional Controls Compliance Monitoring Task 2 Report annually to DTSC on approvals processed by the City to allow Excavation Activities in Restricted Areas and notify DTSC of the nature and scope of the Excavation Activities that occur pursuant to such approvals.	§ 3.5 and Appendix D of O&M Plan, § 8.1 of CAP and §4.7 of Covenant	City of Benicia (Public Works Department)	Annually (for 30 years). First annual report due May 15, 2005.	Provide Report on inspection to DTSC and other parties to O&M using Annual Inspection and Report Form (Appendix D to O&M Plan).

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Institutional Controls Compliance Monitoring Task 3 Monitor Restricted Areas to identify any unauthorized Excavation Activities. Notify perpetrators to cease unauthorized activities and monitor compliance. If no compliance, take further action to curtail under enforcement provisions of Benicia Zoning Code.	§ 3.5 and Appendix D of O&M Plan	City of Benicia (Public Works Department or outside City Consultant)	Annually (for 30 years). First annual report due May 15, 2005.	Provide Report on inspection to DTSC and other parties to O&M using Annual Inspection and Report Form (Appendix D to O&M Plan).
Institutional Controls Monitoring Task 4 For Five Year Review, submit report to DTSC evaluating the findings during the five year compliance monitoring period and make recommendations to the DTSC for any proposed modification and/or termination of the monitoring requirements.	§ 5 and Appendix E of O&M Plan	City of Benicia (Public Works Department and Community Development Department)	First Five Year Report is due by May 30, 2009. Every five years thereafter.	Submit report to DTSC, using Five Year Inspection and Report Form (Appendix E to O&M Plan).

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Oversight of Excavation Activities in Restricted Areas Task 1 Work with Underground Service Alert (US Alert) to implement special arrangements for US Alert to provide notification to City of Benicia personnel when US Alert is informed of potential Excavation Activities in a Restricted Area.	§ 3.6 of O&M Plan and § 4.2 of CAP	City of Benicia (Public Works Department) with support from PBH	Finalize arrangements as soon as reasonably practicable.	City to provide letter report to DTSC on outcome of efforts to implement arrangements with US Alert promptly after outcome is known.
Oversight of Excavation Activities in Restricted Areas Task 2 If US Alert notifies City of marking of underground utilities in Restricted Area, confirm that any planned Excavation Activities have been authorized by City. If nonauthorized persons have requested marking, notify them of restrictions on Excavation Activities. Conduct follow up checks to confirm no unauthorized Excavation Activities are undertaken.	§ 4.2 of CAP	City of Benicia (Public Works Department)	When applicable.	Reporting on Excavation Activities in Restricted Areas will occur under Institutional Controls Compliance Monitoring Tasks 1 and 2.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Oversight of Excavation Activities in Restricted Areas Task 3 Add notations to City As Built Plans and Permit Plans to show Restricted Areas. Notations to be included on As Built Plans to refer to CAP requirements if Excavation Activities occur in Restricted Areas. Notations to be included on Permit Plans regarding restrictions on changes in zoning and issuance of special use permits under Covenant and prohibition on issue Encroachment Permits for Restricted Areas. If OE-Energetic item is found in any area not designated as an OE Construction Support Area, update As Built Plans and Permit Plans as described in CAP Section 5.1.	§§ 4.3 and 5.1 of CAP	City of Benicia (Public Works Department) with support from PBH for initial marking of plans	Initial marking of plans to occur as promptly as reasonably practicable. For “As Built Plans”, the marking will occur after all nonremedial grading under grading permit issued by the City in connection with the cleanup project is completed and as-built drawings are submitted to City (estimated to require 45-60 days after date of O&M Agreement). Updates to be made when applicable.	Notify DTSC within fifteen days after initial marking of plans is completed. Notify DTSC within 45 days whenever updates are made.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Oversight of Excavation Activities in Restricted Areas Task 4 When Excavation Activities are to occur in OE Notice Areas (as defined in Section 5.1 of CAP), provide OE Warning Notice (Appendix B to CAP) to personnel who conduct the Excavation Activities.	§ 5.1 and Appendix A of CAP	City of Benicia (Public Works Department)	Whenever Excavation Activities occur.	Reporting will occur under Institutional Controls Compliance Monitoring Task 2
Oversight of Excavation Activities in Restricted Areas Task 5 If OE-Energetic or OE-Like item (as defined in Section 5.3 of CAP) is located during Excavation Activities in OE Notice Areas (as defined in Section 5.1 of CAP), notify DTSC. Update City maps to redesignate area as OE Construction Support Area.	§§ 5.1 and 6.0 of CAP	City of Benicia (Public Works Department)	When applicable.	Provide oral notice to DTSC of OE discovery within 48 hours. Within 15 business days, provide written report to DTSC.

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Oversight of Excavation Activities in Restricted Areas Task 6 When non-emergency Excavation Activities are to occur in OE Construction Support Areas, submit Work Plan for DTSC review. Utilize OE Construction Support during Excavation Activities.	§ 5.2.1 of CAP	City of Benicia (Public Works Department)	When applicable.	Provide review copy of Work Plan to DTSC at least 30 days prior to planned start date; respond to any comments provided by DTSC at least 5 days prior to start date.
Oversight of Excavation Activities in Restricted Areas Task 7 When emergency Excavation Activities are to occur in OE Construction Support Areas, notify DTSC orally. Utilize OE construction support during Excavation Activities. Take only action necessary to address emergency. Any additional work to be performed under a Work Plan as described in Task 6.	§ 5.2.2 of CAP	City of Benicia (Public Works Department)	When applicable.	Notify DTSC orally within 48 hours if emergency Excavation Activities are required. When the emergency situation has been addressed, the City shall promptly notify DTSC orally. Within 15 business days after work, the City shall provide a written report to DTSC.

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Oversight of Excavation Activities in Restricted Areas Task 8 If OE-Energetic or OE-Like item is located during Excavation Activities in OE Construction Support Area, notify DTSC.	§ 5.2.1 of CAP	City of Benicia (Public Works Department)	When applicable.	Provide oral notice to DTSC of OE discovery within 48 hours. Within 10 business days, provide written report.
Reporting; Communications Task 1 If any report is made to the City, including its Police and Fire Department, involving any reported encounter with OE or potential OE items on the Project Site after the Remediation Completion Date, comply with requirements of Section 6.0 of CAP	§ 6.0 of CAP	All parties to O&M Agreement who become aware of such an incident.	Any time an OE incident occurs on Project Site after the Remediation Completion Date.	If OE-Energetic or OE-Like item is located on Project Site, give oral notice to DTSC within 48 hours. Within fifteen business days provide written report to DTSC. If no OE-Energetic or OE-Like item is found, report incident on City's annual report to DTSC.
Public Awareness/Educational Programs Task 1 Facilitate use of Cannel Barn Museum for Benicia Arsenal education display to be developed by USACE as part of its operations and maintenance plan for the Benicia Arsenal.	§ 3.7.1 of O&M Plan	City of Benicia	Not applicable.	Not Applicable

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Public Awareness/Educational Programs Task 2 Provide copies of USACE developed educational brochures to City of Benicia to be distributed annually to residences and business with City of Benicia water bills	§ 3.7.2 of O&M Plan	PBH to provide to City of Benicia	30,000 copies have been provided to the City.	Not Applicable
Public Awareness/Educational Programs Task 3 Annually include educational brochure as insert to water bills	§ 3.7.2 of O&M Plan	City of Benicia (Finance Department)	Annually, commencing in May, 2005.	Report filed annually with DTSC, using Annual Inspection and Report Form (Appendix D to O&M Plan). First annual report due May 15, 2005..
Public Awareness/Educational Programs Task 4 Coordinate annual presentation of USACE's training video or other suitable training to personnel in City of Benicia Police Department and Fire Department	§ 3.7.3 of O&M Plan and § 7.3 of CAP	City of Benicia (Human Resources Department)	Annually. First annual report due May 15, 2005.	Report filed annually with DTSC, using Annual Inspection and Report Form (Appendix D to O&M Plan).

TASK	DOCUMENT REFERENCE	RESPONSIBLE ENTITY	SCHEDULE FOR PERFORMANCE	REPORTING METHOD AND SCHEDULE
Public Awareness/Educational Programs Task 5 Establish training program materials for periodic training of personnel in City's Community Development Department and Public Works Department.	§ 3.7.4 of O&M Plan and § 7.1 and Appendix C of CAP	PBH and City of Benicia	Training materials have been prepared and are included as Appendix C to CAP.	Not applicable.
Educational Programs Task 6 Oversee annual training of appropriate City Planning Department personnel, using training materials developed under Task 5.	§ 3.7.4 of O&M Plan and § 7.1 of CAP	City of Benicia (Human Resources Department)	Annually. First annual report due May 15, 2005..	Report filed annually with DTSC, using Annual Inspection and Report Form (Appendix D to O&M Plan)..
Educational Programs Task 7 For Five Year Review, submit report to DTSC evaluating the educational programs and make recommendations to the DTSC for any proposed modification and/or termination of the educational program requirements.	§ 5 of O&M Plan	City of Benicia (Community Development, Public Works Department, Police Department, Fire Department and Human Resources Department)	First Five Year Report is due by May 30, 2009.	Submit report to DTSC, using Five Year Inspection and Report Form (Appendix E to O&M Plan).